

## LISTING OF CLAIMS

1-36. (canceled)

37. (currently amended) A pharmaceutical composition for treating plasmodium parasitemia in a mammal, said composition comprising:

an isolated p42 polypeptide comprising at least a portion of the 42 kDa C-terminal processing fragment of major merozoite surface protein gp195 from a *Plasmodium falciparum* isolate, wherein said isolated p42 polypeptide shares at least ~~one antigenic epitope~~ 80% sequence identity with a polypeptide according to any one of SEQ ID NOs. 2-5, in combination with an adjuvant selected from the group consisting of QS-21 and ISA51 and mixtures thereof, and

wherein the combination of said adjuvant and said isolated p42 polypeptide is capable of inducing an effective immune response against a *Plasmodium* infection in said mammal.

38. (previously presented) The pharmaceutical composition of Claim 37, further comprising a pharmaceutically acceptable carrier.

39. (previously presented) The pharmaceutical composition of Claim 37, wherein said isolated p42 polypeptide is expressed by an insect cell which contains a vector that encodes said polypeptide, and wherein said polypeptide is more immunogenic in a mammalian host than is the same polypeptide expressed in yeast.

40. (previously presented) The pharmaceutical composition of Claim 39, wherein said insect cell is selected from the group consisting of *Spodoptera frugiperda*, *Spodoptera exiaua*, *Choristoneura fumiferana*, *Trichoplusia ni* and *Spodoptera littoralis*.

41. (previously presented) The pharmaceutical composition of Claim 37, wherein said isolated p42 polypeptide is a native sequence p42 polypeptide.

42. (canceled)

43. (previously presented) The pharmaceutical composition of Claim 37, wherein the transmembrane domain of said isolated p42 polypeptide is deleted.

44. (previously presented) The pharmaceutical composition of Claim 37, wherein said isolated p42 polypeptide is fused to a second polypeptide.

45. (previously presented) The pharmaceutical composition of Claim 44, wherein said second polypeptide is a leader sequence fused to the amino terminus of said isolated p42 polypeptide.

46. (previously presented) The pharmaceutical composition of Claim 39, wherein said vector is a baculovirus vector.

47. (previously presented) The pharmaceutical composition of Claim 39, wherein said mammalian host is a primate.

48. (currently amended) The pharmaceutical composition of Claim 37, wherein said isolated p42 polypeptide comprises an amino acid sequence selected from the group consisting of:

- (a) amino acids 1 to 394 of the amino acid sequence of SEQ ID NO:2;
- (b) amino acids 1 to 394 of the amino acid sequence of SEQ ID NO:3;
- (c) amino acids 1 to ~~377~~ 375 of the amino acid sequence of SEQ ID NO:4;
- (d) amino acids 1 to 377 of the amino acid sequence of SEQ ID NO:5; and
- (e) combinations thereof.

49. (previously presented) The pharmaceutical composition of Claim 48, wherein said isolated p42 polypeptide comprises an amino acid sequence selected from the group consisting of:

- (a) amino acids 1 to 373 of the amino acid sequence of SEQ ID NO:2;
- (b) amino acids 1 to 373 of the amino acid sequence of SEQ ID NO:3;
- (c) amino acids 1 to 356 of the amino acid sequence of SEQ ID NO:4;
- (d) amino acids 1 to 356 of the amino acid sequence of SEQ ID NO:5; and
- (e) combinations thereof.

50. (currently amended) An anti-plasmodium vaccine comprising an immunogenic amount of an isolated p42 polypeptide comprising at least a portion of the C-terminal processing fragment of major merozoite surface protein gp195 from a *Plasmodium falciparum* isolate, wherein said isolated p42 polypeptide shares at least ~~one antigenic epitope~~ 80% sequence identity with a polypeptide according to any one of SEQ ID NOs. 2-5, said p42 polypeptide being expressed by an insect cell which contains a vector that encodes said polypeptide, in combination with an adjuvant selected from the group consisting of QS21 and ISA51 and mixtures thereof,

wherein said isolated p42 polypeptide is more immunogenic in a mammalian host than is the same polypeptide expressed in yeast, and

wherein the combination of said adjuvant and said isolated p42 polypeptide is capable of inducing an effective immune response against a *Plasmodium* infection in said mammal.

51. (currently amended) The vaccine of Claim 50, wherein said isolated p42 polypeptide comprises an amino acid sequence selected from the group consisting of:

- (a) amino acids 1 to 394 of the amino acid sequence of SEQ ID NO:2;
- (b) amino acids 1 to 394 of the amino acid sequence of SEQ ID NO:3;
- (c) amino acids 1 to ~~377~~ 375 of the amino acid sequence of SEQ ID NO:4;
- (d) amino acids 1 to 377 of the amino acid sequence of SEQ ID NO:5; and
- (e) combinations thereof.

52. (previously presented) The vaccine of Claim 51, wherein said isolated p42 polypeptide comprises an amino acid sequence selected from the group consisting of:

- (a) amino acids 1 to 373 of the amino acid sequence of SEQ ID NO:2;
- (b) amino acids 1 to 373 of the amino acid sequence of SEQ ID NO:3;
- (c) amino acids 1 to 356 of the amino acid sequence of SEQ ID NO:4;
- (d) amino acids 1 to 356 of the amino acid sequence of SEQ ID NO:5; and
- (e) combinations thereof.

53. (previously presented) A method of inducing an anti-plasmodium immune response in a mammal comprising administering to said mammal the vaccine of Claims 50, 51 or 52.

54. (previously presented) The method of Claim 53, wherein said immune response provides at least 92% inhibition of plasmodium parasitemia in said mammal.

55. (previously presented) The method of Claim 53, wherein said mammal is a primate.

56. (new) A pharmaceutical composition for treating plasmodium parasitemia in a mammal, said composition comprising:

an isolated p42 polypeptide comprising at least a portion of the 42 kDa C-terminal processing fragment of major merozoite surface protein gp195 from a *Plasmodium falciparum* isolate, wherein said isolated p42 polypeptide shares at least 80% sequence identity with a polypeptide according to SEQ ID NO: 8, in combination with an adjuvant selected from the group consisting of

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QS-21 and ISA51 and mixtures thereof, and

wherein the combination of said adjuvant and said isolated p42 polypeptide is capable of inducing an effective immune response against a *Plasmodium* infection in said mammal.